

## REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants wish to thank the Examiner for the notice that Claim 11 would be allowable if rewritten to include limitations from any intervening claims. In addition, Applicants wish to thank the Examiner for the removal of all previous rejections and objections except for the remaining rejection addressed below.

Claims 1-10 and 12-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Abadi et al (U.S. Patent No. 5,315,657). Since the claims have been rejected as being anticipated by the above-referenced, the above-referenced must include each and every limitation described in Applicants' claims. In the "Response to Arguments" section of the Office Action, the Examiner alleges that the Abadi reference specifically teaches an information security system that includes the plurality of trusted authorities configured in the hierarchical structure that includes at least one of the trust authorities being a superior authority and at least one of the trusted authorities being a subordinate authority. In addition, the Office Action alleges that the existing information security system in Abadi also includes a superior authority that is operative to generate intra trust authority trust modification data to dynamically vary validation starting authorities among the subordinate authorities and cites Col. 7, Lines 27-40 for teaching the system wherein the superior authority generates trust modification data to dynamically create a validation starting authorities among the existing subordinate authorities. However, Applicants respectfully submit that upon analysis of the cited portion, the cited portion refers not to a information security system that already exists that includes a superior authority and the plurality of subordinate authorities, but to the contrary refers to adding a subordinate authority to a system. Applicants' claim a different operation and structure.

Applicants claim an information security system that already includes a superior authority and that already includes at least one subordinate authority and that the existing subordinate authority is already part of the system and as such, it appears that the rejection does not give the appropriate meaning to the claim language. The claim specifically requires that the subordinate authority is already a part of the system and that the superior authority generates trust modification data “to dynamically vary validation starting authorities among the subordinate authorities.” As such, the claimed invention is directed to varying validation starting authorities of subordinate authorities that are already part of the system. This is not taught or suggested by the cited reference.

In fact, the cited portion of the Abadi reference merely teaches that a network manager may add a principal or another certifying authority to the system and may deposit the encoded message into a system (see Col. 7, Lines 29-31). Applicants are not claiming adding another certified authority to the system, but to the contrary, for certified authorities that already exist, varying, dynamically, validation starting authorities among the existing subordinate authorities. Applicants’ claim requires that the subordinate authorities are already part of the system. Abadi does not contemplate changing or dynamically varying validation starting authorities among existing subordinate authorities as required. Accordingly, the claims are in condition for allowance.

As per Claims 2 and 16, the Office Action cites Col. 7, Lines 48-65 and Col. 8, Lines 12-44 as allegedly teaching a subordinate authority that issues a certificate responsive to the inter trust authority modification data that issues a certificate for at least one subscriber based on the inter trust authority modification data. However, the cited portions of the reference merely indicate that there is a hierarchical certificate authority structure and that a principal merely looks

up a certificate signed by a CA along the hierarchy so a chain of certificates can be obtained so that the principal knows that the message or information can be trusted. This is consistent with conventional certificate chain on a checking technique.

In contrast, Applicants claim that a subordinate authority issues certificates in response to inter trusted authority modification data from a trusted authority, namely a superior authority in the hierarchy, and issues a certificate based on the inter trusted authority modification data. Hence the trust authority must be changed as required in the claim based on the inter trusted authority modification data. Such change in trust authority is not taught or suggested by the cited reference and no mechanism for doing so is claimed. Accordingly, these claims are also believed to be in condition for allowance.

As to Claims 3 and 17, Applicants respectfully reassert the relevant remarks made above.

As to Claim 9, Applicants respectfully reassert the relevant remarks made above with respect to Claims 1-3.

As to Claims 4, 10 and 18, Applicants respectfully reassert the relevant remarks made above.

As to Claims 5, 11 and 19, the Office Action cites Column 7, lines 50-53 and Column 8, lines 42-44 as allegedly teaching that a superior authority includes a trust anchor modification data certificate issuer that provides trust anchor modification data as a signed data structure for subordinate authorities. As explained in Applicants' Specification, trust anchor modification data may indicate for example that the trust anchor for a given subscriber may be modified or the trust anchor for a given subordinate authority may be modified. This can be done, for example, through a certificate store in a repository. The trust anchor for a given subscriber may be modified by a subordinate authority without requiring action by the superior certification

authority. Hence, Applicants' system allows for variation of trust anchors for a subscriber to facilitate trust adjustment in response to compromises to a certification authority in the hierarchy. The cited portions of Abadi merely state that there is a directory which contains certificates of the various certification authorities. Applicants, as noted above, are unable to find any trust modification data described in Abadi. If the rejection is maintained, Applicants respectfully request a showing of the same.


As to Claims 6, 12 and 20, the claims require among other things that the trust anchor modification data include at least one of subordinate authority cross certification allowance data indicating for example whether a subordinate authority can cross certify with another authority, the scope of certification data and other information affecting the trust anchor that is identified through the trust anchor certificate issued by superior authority. Such a certificate is not described or generated in the Abadi reference as the Abadi reference does not seek to alter the trust anchors in the hierarchical structure, but merely appears to teach how to obtain certificates in existing chains when verifying a signature or received data. Accordingly, these claims are in condition for allowance.

As to Claims 7 and 13, Applicants respectfully reassert the relevant remarks made above with respect to Claims 1 and 12.

As to Claims 8, 14 and 21, there is no inter trusted authority trust modification data communicated in the Abadi system. Accordingly, these claims are also believed to be in condition for allowance. If the rejection is maintained, Applicants respectfully request identification by column and line number of what the Examiner is purporting to be Applicants' claimed "inter trusted authority trust modification data" as taught in Abadi.

Accordingly, Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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